

WHAT WE CLAIM IS:

1. An extended search method comprising:
 - receiving a search query;
 - searching a standard index of a set of replicated standard indexes having multiple instances of the standard index, based on said search query;
 - detecting a signal based on said searching of said standard index; and
 - when the signal meets predefined criteria:
 - searching an extended index of a set extended indexes having at least one instance of the extended index, wherein there are fewer instances of the extended indexes than instances of the standard index;
 - obtaining extended search results from the extended index; and
 - transmitting at least a portion of the extended search results.
2. The extended search method of claim 1, wherein said detecting comprises determining whether said searching of said standard index will produce less than a predetermined number of standard search results.
3. The extended search method of claim 1, wherein said detecting comprises determining whether said searching of said extended index will add a cost to performing said search query that is less than a predefined cost threshold.
4. The extended search method of claim 1, wherein said detecting comprises determining that an amortized cost of searching the extended index is less than a predefined cost threshold.
5. The extended search method of claim 1, wherein said detecting comprises determining that the user is not satisfied with standard search results returned from searching the standard index.
6. The extended search method of claim 1, wherein said detecting comprises determining that a load on the extended index is less than a predefined load threshold.
7. The extended search method of claim 1, wherein said detecting comprises receiving a request for extended search results.
8. The extended search method of claim 1, further comprising, before said searching of said extended index, receiving standard search results from said standard index.

9. The extended search method of claim 8, wherein said detecting comprises determining that a query score of each of said standard search results is below a predetermined limit.
10. The extended search method of claim 8, further comprising, prior to said transmitting, aggregating at least a portion of said standard search results and at least a portion of said extended search results into aggregated search results.
11. The extended search method of claim 10, wherein said transmitting comprises transmitting said aggregated search results.
12. The extended search method of claim 1, wherein said searching of said standard index comprises searching a cache of stored search results.
13. The extended search method of claim 12, wherein said searching of said standard index further comprises searching a standard index server when results of said search query are not stored in said cache.
14. The extended search method of claim 1, wherein said searching of said extended index comprises searching an extended cache of stored extended search results.
15. The extended search method of claim 14, wherein said searching of said extended index further comprises searching an extended index server when results of said search query are not stored in said extended cache.
16. The extended search method of claim 1, wherein said searching of said standard index and said searching of said extended index further comprise generating a list of search results and generating associated snippets of documents identified by at least a subset of said search results.
17. The extended search method of claim 1, further comprising, before said obtaining:
 - estimating a number of extended search results that will be obtained; and
 - transmitting said number to a requester of said search query.
18. An extended search method comprising:
 - receiving search queries at each of a plurality of standard search engines, each having a local instance of a standard index of documents;
 - at each of the standard search engines, searching the standard index of documents based on a respective received search query,

receiving a signal based on said searching of the standard index, and
when the received signal meets predefined criteria:

searching a shared extended index based on the respective received
search query to obtain extended search results from the extended index; and

transmitting at least a portion of the extended search results;

wherein the shared extended index is shared by the plurality of standard search
engines.

19. A document search system, comprising:

multiple replicated standard indexes;

one or more replicated extended indexes, wherein there are fewer replicated
extended indexes than replicated standard indexes;

a mixer, comprising:

a processor;

a communications interface; and

a memory, comprising:

communications procedures for receiving a search query, and
for transmitting search results;

a signal threshold value;

signal comparison procedures for comparing a signal obtained
from searching a standard index of said standard search indexes with
predefined criteria; and

searching procedures for searching at least one of said standard
indexes based on said search query, and for searching an extended
index of said one or more extended indexes based on said signal, said
predefined criteria, and said search query.

20. The document search system of claim 19, wherein said predefined criteria comprise
said signal threshold value.

21. The document search system of claim 19, further comprising a query server
configured to receive search queries, transmit said search queries to said mixer, receive search
results from said mixer, and transmit said search results to requesters of said search queries.

22. The document search system of claim 19, comprising a cache coupled to said mixer, where said cache stores cached search results.
23. The document search system of claim 22, wherein said cache contains snippets of documents represented by at least a subset of said cached search results.
24. The document search system of claim 19, further comprising at least one standard balancer coupled between said mixer and said standard index, where said at least one standard balancer distributes said search queries among partitioned subsets of said standard index.
25. The document search system of claim 19, further comprising at least one standard document server coupled to said mixer, where said at least one standard document server generates snippets for at least a subset of documents identified by each standard search result.
26. The document search system of claim 19, further comprising an extended mixer coupled between said mixer and said extended indexes.
27. The document search system of claim 19, further comprising an extended cache coupled to said extended mixer, where said extended cache stores cached extended search results.
28. The document search system of claim 27, wherein said extended cache stores snippets of at least a subset of documents identified by said cached extended search results.
29. The document search system of claim 19, further comprising at least one extended balancer coupled between said extended mixer and said extended index, where said extended balancer distributes said search queries among partitioned subsets of said extended index.
30. The document search system of claim 19, further comprising at least one extended document server coupled to said extended mixer, where said at least one extended document server generates snippets for at least a subset of documents identified by each extended search result.
31. The document search system of claim 19, wherein said standard indexes are stored on a plurality of standard index servers that are distinct and separate from the mixer.

32. The document search system of claim 19, wherein said one or more extended indexes are stored on a plurality of extended index servers that are distinct and separate from the mixer.

33. A document search system, comprising:

- a plurality of standard search engines, each having a local instance of a standard index of documents;

- an extended index of documents;

- each of the standard search engines including:

- search logic configured to search the standard index of documents based on a respective search query, and to detect a signal that is based on said searching of the standard index;

- extended logic, activated when the detected signal meets predefined criteria, and configured to search the extended index based on the respective search query to obtain extended search results from the extended index; and

- an interface to transmit at least a portion of the extended search results;

- wherein the extended index is shared by the plurality of standard search engines.